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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,533	12/26/2001	Walter Hartner	Z&PINFN10277	3654

7590 11/17/2003  
LERNER AND GREENBERG, P.A.  
Post Office Box 2480  
Hollywood, FL 33022-2480

EXAMINER
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TALBOT, BRIAN K

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 11/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

### Office Action Summary

Application No.

10/027,533

Applicant(s)

HARTNER ET AL.

Examiner

Brian K Talbot

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,4-19 and 22-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-19 and 22-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. The amendment filed 9/3/03 has been considered and entered. Claims 2,3,20 and 21 have been canceled. Claims 1,4-19 and 22-34 remain in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. In light of the amendment filed 9/3/03, the 35 USC 112 second paragraph rejections have been withdrawn.

***Claim Rejections - 35 USC § 103***

4. Claims 1,4-19 and 22-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu (5,320,978) in combination with Xue et al. further in combination with Ha et al. (5,970,309) or JP 09-289,291 or JP 08-222,711.

Hsu (5,320,978) teaches a method for selective deposition of platinum on a substrate. The substrate is prepared having catalytic areas and non-catalytic areas and applying platinum metal to the catalytic areas. (col. 2, line 16 – col. 4, line 27 and Fig. 1).

Hsu (5,320,978) fails to teach the platinum layer being formed from organometallic precursors.

Xue et al. teaches forming platinum layer from organometallic precursors for selective deposition at temperature ranges from 25-180°C (entire reference).

Therefore, it would have been within the skill of one practicing in the art to have modified Hsu (5,320,978) process by utilizing the organometallic precursors as evidenced by Xue et al. with the expectation of achieving similar success. In addition, selective deposition would obviate the need for subsequent etching steps which would save time and money.

Hsu (5,320,978) in combination with Xue et al. fail to teach “producing” catalytic and non-catalytic sites by planarizing or patterning.

Ha et al. (5,970,309) (see Fig. 2) or JP 09-289,291 (see abstract) or JP 08-222,711 (see Figs. 6,10,13 and 16 and abstract) all teach ferroelectric capacitors whereby a planarizing and/or patterning step is taught to form “catalytically” active areas and non-catalytic areas whereby the an electrode is formed thereon the catalytic areas.

Therefore, it would have been obvious for one skilled in the art at the time the invention was made to have modified Hsu (5,320,978) in combination with Xue et al. process by incorporating a planarizing/patterning step as evidenced by Ha et al. (5,970,309) or JP 09-289,291 or JP 08-222,711 with the expectation of achieving the desired end product, i.e. a surface having active and non-active sites for electrode formation.

#### ***Response to Amendment***

5. Applicant's arguments filed 9/3/03 have been fully considered but they are not persuasive.

Applicant argued that Hsu fails to teach the temperature range, platinum organometallic and the patterning, Xu teaches a temperature range outside that claimed and Ha teaches depositing refractory material and not precious metals.

The Examiner agrees in part. While the Examiner acknowledges the fact that the reference singularly fail to teach the claimed invention, the rejection of record is a combination rejection which incorporates the claimed features as detailed above. Xu is cited for teaching an organometallic precursor with an overlapping range of temperatures. This would overcome the deficiencies of Hsu concerning these points. With regards to the temperature range, it has been well settled that overlapping ranges are an obvious modification of the art (In Re Malagari, 182 USPQ 549). Ha is utilized for teaching patterning and planarizing and not for the specific materials utilized.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1762

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Talbot whose telephone number is (703) 305-3775. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3775.



Brian K Talbot  
Primary Examiner  
Art Unit 1762

BKT  
November 13, 2003